

Title (en)
POLYAMIDE RESIN AND PREPARATION METHOD THEREFOR, COMPOSITION, AND FIBER PRODUCT

Title (de)
POLYAMIDHARZ UND HERSTELLUNGSVERFAHREN DAFÜR, ZUSAMMENSETZUNG UND FASERPRODUKT

Title (fr)
RÉSINE POLYAMIDE ET SON PROCÉDÉ DE PRÉPARATION, COMPOSITION ET PRODUIT FIBREUX

Publication
EP 4353768 A1 20240417 (EN)

Application
EP 22819070 A 20220114

Priority
• CN 202110641293 A 20210609
• CN 2022071923 W 20220114

Abstract (en)
The present disclosure provides a polyamide resin and a preparation method therefor, a composition, and a fiber product. The polyamide comprises diamine structural units and diacid structural units, wherein 90 mol% or more of the diacid structural units are derived from adipic acid, 90 mol% or more of the diamine structural units are derived from 1,5-pentanediamine, and the polyamide resin contains a water-extractable substance in a content of 0.7 wt.% or less. The water-extractable substance has a number average molecular weight of 2000 or less. The preparation method of the polyamide resin of the present disclosure is simple without using large-scale equipment, and the process parameters thereof are easy to control, thereby facilitating mass production thereof. The polyamide resin of the present disclosure has a long spinneret wipe cycle time and less broken filament times, and the obtained fiber has less broken filaments, low yarn unevenness, less dyed dark grain, a good dyeing effect, and an excellent elongation at break, breaking strength and a lower boiling water shrinkage, a high spinning yield and a high dyeing yield.

IPC 8 full level
C08G 69/46 (2006.01); **C08G 69/26** (2006.01)

CPC (source: CN EP)
C08G 69/26 (2013.01 - CN EP); **C08G 69/265** (2013.01 - EP); **C08G 69/28** (2013.01 - CN EP); **C08G 69/36** (2013.01 - EP);
C08G 69/46 (2013.01 - CN EP); **D01D 1/00** (2013.01 - EP); **D01F 6/60** (2013.01 - CN EP)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4353768 A1 20240417; CN 115449070 A 20221209; CN 115449070 B 20240223; JP 2024521432 A 20240531; TW 202248288 A 20221216;
WO 2022257462 A1 20221215

DOCDB simple family (application)
EP 22819070 A 20220114; CN 202110641293 A 20210609; CN 2022071923 W 20220114; JP 2023575942 A 20220114;
TW 111107463 A 20220302